

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,472	11/12/2003	Axel Herbst	6570P057	9414
45062 SAP/BLAKEL	7590 06/22/2007 .Y		EXAM	INER
1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040		RAYYAN, SUSAN F		
	z, CA 94085-4040	·	ART UNIT	PAPER NUMBER
	•	2167		
			MAIL DATE	DELIVERY MODE
			06/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/712,472	HERBST ET AL.			
Office Action Summary	Examiner	Art Unit			
	Susan F. Rayyan	2167			
The MAILING DATE of this communication app					
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tile will apply and will expire SIX (6) MONTHS from the cause the application to become AB ANDONE	N. mely filed h the mailing date of this communication. ED (35 U.S.C.§ 133).			
Status		•			
1)⊠ Responsive to communication(s) filed on <u>08 M</u>	Responsive to communication(s) filed on <u>08 March 2007</u> .				
<i>7</i>	<i>,</i> —				
,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under E	:x paπe Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Disposition of Claims					
4) Claim(s) 40-55 is/are pending in the application	Claim(s) 40-55 is/are pending in the application.				
<del></del>	4a) Of the above claim(s) is/are withdrawn from consideration.				
5) Claim(s) is/are allowed.					
6) Claim(s) 40-55 is/are rejected.					
7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or	r alaction requirement				
8) Claim(s) are subject to restriction and/or	· election requirement.				
Application Papers					
9) The specification is objected to by the Examine	r.	·			
	⊠ The drawing(s) filed on <u>12 November 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.				
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
The dath of declaration is objected to by the Ex	danniner. Note the attached Office	Action of form PTO-132.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:					
	<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>				
3. Copies of the certified copies of the prior	• •				
application from the International Bureau	•	ou in the Huterian Otage			
* See the attached detailed Office action for a list		ed.			
Attachment(s)	4) 🗔 Indo-stone Sum	L/DTO 442)			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D	Date			
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5)  Notice of Informal I	Patent Application			

Application/Control Number: 10/712,472 Page 2

Art Unit: 2167

#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 8, 2007 has been entered.

- 2. Claims 1-39 are canceled.
- 3. Claims 40-55 are pending.

## Claim Objections

4. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 50-55 have been renumbered 49-54.

# Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Art Unit: 2167

the claimed invention is directed to non-statutory subject matter.

Claims 51-55 are rejected under 35 U.S.C. 101 because the claim does not specify that the computer program be embodied on a computer readable storage medium. A computer program that is not embodied on an appropriate computer readable storage medium is nothing more that an abstract idea. When the computer program is stored on an appropriate computer readable storage medium it becomes structurally and functionally interrelated to the medium and will be statutory in most case since use of technology permits the function of the computer program product to be realized.

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 40-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,548,750 issued to Bo E. S. Larsson et al ("Larsson") in view of US Publication Number 2003/0004975 issued to Yukio Nakano et al ("Nakano").

Art Unit: 2167

As per claim 40 Larsson teaches:

a) assigning an identifier for a data object and storing said identifier, said data object

Page 4

stored in a database (Figure 1, elements A' and C', column 6, lines 45-47, as backup

marked in the LID table and column 4, lines 42-45, as A' and C' stored in the database

area);

b) providing said identifier in response to a request requesting one or more identifiers of

one or more data objects to be deleted, locking said identifier, and confirming that

content of an archived version of said data object corresponds to said data object's

content (Figure 6, column 6, lines 45-47, as backup marked in the LID table of the local

dam base);

c) deleting said data object from said database (Figure 6, element Throw out object).

Larsson does not explicitly teach deleting said identifier. Nakano teaches this

limitation at (paragraph 104, lines 4-7, as issue a delete request to delete the inserted

original data) to adapt the deletion of the original data object after it is copied to a

second storage area. It would have been obvious to a person of ordinary skill in the art

at the invention was made to modify Larson with deleting said identifier to adapt the

deletion of the original data object after it is copied to a second storage area.

Art Unit: 2167

As per claim 41 same as claim arguments above and Larsson teaches:

further comprising marking said data object as available for deletion after said version of said data object has been archived (Figure 6, element Throw Old object).

As per claim 42 same as claim arguments above and Larsson teaches: wherein said storing of said identifier further comprises storing said identifier into a relational database (column 6, lines 30-35, LID Table).

As per claim 43 same as claim arguments above and Larsson teaches: further comprising determining if a computing system that uses information stored in said database is currently sufficiently under-utilized to permit performing a), b) and c) (column 2, lines 52-55).

As per claim 44 is rejected based on the same rationale as claim 40 above.

As per claim 45 same as claim arguments above and Larsson teaches: wherein the number of said one or more identifiers is limited to a value specified by an administrator (column 6, lines 40-44).

As per claim 46 same as claim arguments above and Larsson teaches: wherein said one or more data objects are within the same logical partition of said database (column 4, lines 25-30, as primary memory divided into two parts: database

Art Unit: 2167

area and backup area, A' and C' are stored in the database area).

As per claim 47 same as claim arguments above and Larsson teaches:
assigning and storing a second identifier for a second data object, said second data
object stored in a database(Figure 1, elements C', column 6, lines 45-47, as backup

marked in the LID table and column 4, lines 42-45, as C' stored in the database area);

locking said identifier and confirming that content of an archived version of said second data object corresponds to said second data object's content(Figure 6, column 6, lines

45-47, as backup marked in the LID table of the local dam base);

deleting said second data object from said database... Figure 6, element Throw out object).

As per claim 48 same as claim arguments above and Larsson teaches:

further comprising limiting the number parallel deleting operations to a value specified by an administrator (Figure 6, Throw OUT Object).

As per claim 50 Larsson teaches:

assigning an identifier for a data object and storing said identifier, said data object stored in a database(Figure 1, elements A' and C', column 6, lines 45-47, as backup

marked in the LID table and column 4, lines 42-45, as A' and C' stored in the database area):

data providing said identifier in response to a request made by a second module requesting one or more identifiers of one or more objects to be deleted, locking said identifier(Figure 6, column 6, lines 45-47, as backup marked in the LID table of the local dam base);

a second module comprising second program code that when executed by said machine performs a second method, comprising:

confirming that content of an archived version of said data object corresponds to said data object's content(Figure 6, column 6, lines 45-47, as backup marked in the LID table of the local dam base);

deleting said data object. (Figure 6, element Throw out object).

Larsson does not explicitly teach deleting said identifier. Nakano teaches this limitation at (paragraph 104, lines 4-7, as issue a delete request to delete the inserted original data) to adapt the deletion of the original data object after it is copied to a second storage area. It would have been obvious to a person of ordinary skill in the art at the invention was made to modify Larson with deleting said identifier to adapt the deletion of the original data object after it is copied to a second storage area.

As per claim 51 same as claim arguments above and Larsson teaches:

Art Unit: 2167

receiving a request from said second software module, said request requesting the identity of data objects marked for deletion, responding to said request by providing to said second software module one or more identifiers identifying a corresponding one or more data objects marked for deletion (Figure 6, Throw Out Object).

As per claim 52 same as claim arguments above and Larsson teaches: wherein said first method further comprises limiting the number of said one or more identifiers to a value specified by an administrator(column 6, lines 40-44).

As per claim 53 same as claim arguments above and Larsson teaches: wherein said first method is written to permit said first module to comprehend that said one or more data objects are within the same logical partition of said database (column 4, lines 25-30, as primary memory divided into two parts: database area and backup area, A' and C' are stored in the database area).

As per claim 54 same as claim arguments above and Larsson teaches: wherein said second method further comprises repeatedly issuing requests for the identity of data objects marked for deletion (column 2, lines 50-55, backup periodically).

Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,548,750 issued to Bo E. S. Larsson et al ("Larsson") in view of US Publication Number 2003/0004975 issued to Yukio Nakano et al ("Nakano"). as applied to claim 40 above, and further in view of US Patent 7,035,866 issued to Chia-Hsun Chen et al ("Chen").

As per claim 49 same as claim arguments above and Larsson in view of Nakano do not teach wherein said data object is formatted according to an XML format. Chen does teach this limitation (column 4, lines 27, xml format) to efficiently process data. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Larsson in view of Nakano to efficiently process data as described by Chen (column 4, lines 25-35).

#### Response to Arguments

7. Applicant's arguments with respect to claims 1-39 have been considered but are moot in view of the new ground(s) of rejection.

#### **Contact Information**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan F. Rayyan whose telephone number is 571-272-1675. The examiner can normally be reached on M-F, 7:30-4:00.

Art Unit: 2167

Page 10

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Su

SR

5/27/2007

JOHN COTTINGHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100